

AEG 5/24/07

IN THE SPECIFICATION

Please enter the following amended replacement paragraphs:

31 AEG 5/24/07  
[0040] Alternatively, gain adjustments  $G_n$  and phase adjustments  $\Phi_n$  compensating for  $G_d(A)$  can be modified during operation until the correct response is achieved for the channel. Input controls may be provided, for example, for the user to adjust the transformation parameters  $G_n$  and  $\Phi_n$  in real time. Alternatively, an adaptive loop may be provided, for example, that automatically adjusts the transformation parameters  $G_n$  and  $\Phi_n$  in real time. For example, a test signal may be transmitted and received through a satellite transponder channel or a simulation of the channel, and the error in the received signal may be used to adjust the transformation parameters  $G_n$  and  $\Phi_n$  until the received signal is correct. The input controls can be, for example, a set of manual potentiometer knobs or a computer controlled channel-QOS feedback loop. In practice, the transformation parameters  $G_n$  and  $\Phi_n$  may be set once for each set of channel conditions and satellite transponder.